

86. The method of claim 77, wherein the number of phagemid particles displaying more than one copy of the fusion protein is less than 1% of the phagemid particles displaying a single copy of the fusion protein.

87. The method of claim 77, wherein the conditions are adjusted so that the number of fusion proteins per recombinant phagemid particle is about 0.1 (number of bulk fusion proteins/number of phagemid particles).

88. The method of claim 77, wherein the gene fusion comprises a DNA triplet encoding an mRNA suppressible terminator codon between the first gene encoding a polypeptide and the second gene encoding at least a portion of a phage coat protein.

89. A gene fusion, comprising a first gene encoding a first polypeptide, a second gene encoding a second polypeptide, and a suppressible termination codon between or adjacent to the first and second genes.

90. The gene fusion of claim 89, wherein the second polypeptide is at least a portion of a phage coat protein.

91. The gene fusion of claim 90, wherein the suppressible termination codon is UAG, UAA or UGA.

92. The gene fusion of claim 90, wherein the phage coat protein is a filamentous bacteriophage coat protein III or a portion thereof.--

REMARKS AND REQUEST FOR CONSIDERATION

Upon entry of the Preliminary Amendment, claims 53-92 are pending in this case. Support for the new claims is found in the claims as originally filed and in the specification as filed. No new matter is believed to have been introduced.

The specification has been amended to correct a typographical error and to indicate the sequence identification numbers.

Early entry of these amendments is requested. The inventors submit that this application is now in compliance with the requirements of 37 CFR 1.821-1.825, and respectfully request further processing of this application.

New Claims 53-88 are supported by the specification as filed and are substantially directed to a method of producing a product polypeptide in which the DNA which encodes the product polypeptide is obtained by a phagemid display method of the invention. A method of identifying novel binding polypeptides is the subject of the grandparent application Serial No. 08/463,587, now US Patent No. 5,821,047 and great grandparent application Serial No. 08/050,058, now US Patent No. 5,750,373. See also US Patent No. 6,040,136 which claims phagemid vectors. The method of the present invention substantially includes the method steps of the grandparent application and further includes additional steps of selecting the novel binding polypeptide, cloning DNA encoding the product polypeptide into an expression vector and producing the product polypeptide by culturing a host cell containing the expression vector. Since the grandparent claims were found to be allowable and the present claims substantially include the steps of the grandparent application plus additional steps, the claims of the present application are also believed to be allowable.

Support for the additional steps recited in the present claims is found in the specification as filed, for example, on page 1, lines 4-5; page 3, lines 38-39; page 9, lines 11-13 and the generally well-known methods of cloning, vector construction, cell culture and polypeptide expression which are described on pages 11-20 and in the examples.

New claims 89-92 are supported by page 15, line 29 over to page 16, line 7.

The claims now pending in this application are believed to be in condition for allowance.

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